IN THE CLAIMS

Please amend claims 1, 61, and 90 as follows:

1.   (Currently Amended) A system for facilitating adaptive grid-based document layout, the system comprising:

a template storage unit adapted to store a plurality of templates;

a layout engine adapted to apply document content to a template of said plurality of templates, wherein said layout engine is further adapted to determine a score providing a measure of how well said document content fits said template; ~~and~~

a paginator adapted to provide said document content and said plurality of templates to said layout engine, receive said quality score from said layout engine, and use the quality score, ~~determine a desirable pairing of~~ document content and said plurality of templates to find an optimal pagination of the plurality of templates by measuring an effectiveness of various sequences of the plurality of templates;

an adaptive grid-based document generated by using the layout engine to format the document content according to the optimal pagination of the plurality of templates and displaying the document to a user.

2.   (Original) The system of claim 1, wherein the paginator is further adapted to select a set of templates from said plurality of templates and to provide said set of templates to said layout engine for processing.

3.   (Original) The system of claim 1, wherein said quality score determined by said layout engine is an optimization problem which seeks to optimize a second quality score across interdependent elements within said template.

4.   (Original) The system of claim 1, wherein the system further comprises: a style sheets storage unit adapted to store a plurality of style sheets, wherein said plurality of style sheets specify the styling of text in said document content.

5.　　(Original) The system of claim 1, wherein the system further comprises:

　　　　a template authoring tool adapted to create and modify templates of said plurality of templates; and

　　　　a user interface adapted to receive output from said template authoring tool and display said output to a user.

6.　　(Original) The system of claim 5, wherein one template of said plurality of templates comprises a parent template having characteristics, and wherein said template authoring tool is further adapted to create and modify a child template that inherits characteristics from said parent template.

7.　　(Original) The system of claim 6, wherein said characteristics include guidelines, elements, constraints, and preconditions.

8.　　(Original) The system of claim 5, wherein said template authoring tool is further adapted to assign a fitness scoring function to a template of said plurality of templates, wherein said fitness scoring function is customizable for determining a fitness of said template for a portion of said document content.

9.　　(Original) The system of claim 8, wherein said user interface is further adapted to assign an attribute preference to an element within said template, wherein said attribute preference is used to determine said fitness of said template.

10.　　(Original) The system of claim 9, wherein said attribute preference comprises a first attribute preference of a plurality of attribute preferences, and wherein said user interface is further adapted to order a subset of said attribute preferences in a sequence defining the importance of said attribute preferences to said layout engine.

11.　　(Original) The system of claim 5, wherein said user interface is further adapted to organize said set of templates in a recursive template configuration.

12.   (Original) The system of claim 11, wherein said recursive template configuration permits a first template to be nested within a second template.

13.   (Original) The system of claim 5, wherein said template authoring tool is further adapted to create and modify a parameterized template having at least one global layout parameter, wherein said parameterized template allows manipulation of said at least one global layout parameter of said parameterized template.

14.   (Original) The system of claim 5, wherein said plurality of templates comprises an aggregate template that combines characteristics of a first template and a second template of said plurality of templates, wherein said first template and said second template define different aspects of document layout.

15.   (Original) The system of claim 5, wherein said plurality of templates comprises an annotated template, wherein said annotated template includes a user-added attribute preference that assists said paginator in making layout and pagination decisions.

16.   (Original) The system of claim 5, wherein said user interface is further adapted to create a guideline for a template of said plurality of templates, wherein said guideline is used to arrange elements within said template.

17.   (Original) The system of claim 16, wherein said guideline has a position defined relative to the entire page of said template.

18.   (Original) The system of claim 16, wherein said guideline is a first guideline and said user interface is further adapted to create a second guideline for said template of said plurality of templates, wherein said second guideline has a position defined as a constant offset from said first guideline, if said second guideline is created after selecting said first guideline.

19.   (Original) The system of claim 16, wherein said guideline is a first guideline and said user interface is further adapted to create a second guideline for said template of said plurality of templates, wherein said second guideline has a position defined relative to said first guideline and a third guideline, if said second guideline is created after selecting said first guideline and said third guideline.

20.   (Original) The system of claim 1, wherein said template comprises:

at least one layout element that defines a particular region within a layout page of said template;

at least one constraint-based relationship that defines an arrangement of the layout elements within said template; and

at least one precondition that characterizes the suitability of said template for document content.

21.   (Original) The system of claim 20, wherein said template storage unit is further adapted to store a plurality of adaptive layout styles.

22.   (Original) The system of claim 21, wherein an adaptive layout style of said plurality of adaptive layout styles comprises a second plurality of templates and defines a layout design characteristic of said second plurality of templates.

23.   (Original) The system of claim 20, wherein said at least one layout element comprises at least one source stream variable that specifies the type of document content which may be used in said at least one layout element.

24.   (Original) The system of claim 20, wherein said at least one layout element comprises at least one element z-order placement variable that specifies the z-order within said template of said at least one layout element.

25.   (Original) The system of claim 20, wherein said at least one layout element comprises at least one layout template variable that specifies a layout template used to layout a content item including at least one content stream.

26.   (Original) The system of claim 20, wherein said at least on constraint-based relationship comprises:

at least one constraint input variable that including data about the context of said document content; and

at least one constraint output variable that represents output attributes of said document content.

27.   (Original) The system of claim 20, wherein said at least one precondition comprises at least one content preconditions variable that indicates the amount of said document content required to fill said template.

28.   (Original) The system of claim 20, wherein said at least one precondition comprises at least one value preconditions variable that indicates a range of values for a predetermined constraint-based relationship.

29.   (Original) The system of claim 27, wherein said at least one precondition characterizes the suitability of said template for a display context.

30.   (Original) The system of claim 1, wherein said document content comprises a first content stream having a first type of content.

31.   (Original) The system of claim 30, wherein said document content further comprises a second content stream having a second type of content and wherein said first content stream comprises a first content item, said second content stream comprises a second content item, and said first content item references said second content item.

32.   (Original) The system of claim 31, wherein said first content stream comprises a plurality of content items including said first content item, and wherein said content items of said plurality of content items are placed on a page of a document with said second content item.

33.   (Original) The system of claim 30, wherein said first content stream comprises at least one content stream attribute that specifies how to evaluate document content within said first content stream.

34.   (Original) The system of claim 30, wherein said first content stream comprises at least one style identifier that defines the styling of text within said first content stream.

35.   (Original) The system of claim 30, wherein said document content comprises a third content stream having at least one content item including a plurality of content streams.

36.   (Original) The system of claim 30, wherein said document content further comprises a second content stream including at least one content item including a plurality of versions of content.

37.   (Original) The system of claim 36, wherein a selection of a version of content from said plurality of versions of content is dependent on whether inclusion of said version of content improves a score associated with how well said document content fits said template.

38.   (Original) The system of claim 30, wherein said document content further comprises a second content stream including an optional content stream including at least one content item, wherein the selection of said at least one content item is dependent on whether inclusion of said at least one content item improves a score associated with how well said document content fits said template.

39.   (Original) The system of claim 38, wherein said score associated with how well said document content fits said template is dependent on at least a plurality of attribute values associated with said at least one content item of said optional content stream.

40.   (Original) The system of claim 30, wherein said document content further comprises a second content stream and wherein said fifth content stream includes a content item adapted to express a content-dependent constraint.

Claims 41-60:   (Canceled)

61.   (Currently Amended) A method for determining a sequence of templates for document layout, the method comprising the steps of:
        laying out a portion of document content using a template;
        evaluating a template score variable of the template using the portion of document content;
        determining a number of widows and orphans in page layout resulting from application of the template to document content;
        calculating a quality score of the template based on the template score variable and the determined number of widows and orphans; and
        using the quality score to influence a choice of a an optimal pagination of the sequence of templates for paginating all document content by measuring an effectiveness of different variations of the sequence templates to generate an adaptive grid-based document; and
        displaying the adaptive grid-based document to a user.

Claims 62-89:   (Canceled)

90. (Currently Amended) A computer-readable <u>storage</u> medium having <u>stored</u> <u>thereon</u> computer-executable instructions for determining a sequence of templates for document layout, the computer-executable instructions performing the steps of:

laying out a portion of document content using a template;

evaluating a template score variable of the template using the portion of document content;

determining a number of widows and orphans in page layout resulting from application of the template to document content;

calculating a quality score of the template based on the template score variable and the determined number of widows and orphans; ~~and~~

using the quality score to influence a choice of ~~a~~ <u>an optimal pagination of</u> <u>the</u> sequence of templates for paginating all document content <u>by measuring an</u> <u>effectiveness of different variations of the sequence templates to generate an adaptive</u> <u>grid-based document; and</u>

<u>displaying the adaptive grid-based document to a user</u>.

Claims 91-98: (Canceled)